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transmit a collision detection signal to the base station following receipt of the L1 acknowledgement; and cease signal transmission to the base station after a period of time if no base station collision detection signal corresponding to the transmitted collision detection signal has been received from the base station.

87. A wireless mobile station, comprising:

a controller coupled to a receiver and to a transmitter, such that in operation the controller causes the mobile station to perform functions, including functions to:

- (a) transmit the first coded signal to a base station, without any message data, at a first power level, the first coded signal including one or more codes that distinguish the first coded signal from another coded signal, the first coded signal not including message data;
- (b) transmit a second coded signal to the base station, without any message data, at a second power level a step higher than the first power level, upon expiration of a predetermined interval following the end of the transmission of the first coded message at the first power level, provided that no L1 acknowledgment corresponding to the first coded signal is received at the mobile station, the second coded signal including one or more codes that distinguish the second coded signal from another coded signal, the second coded signal not including message data;
- (c) cease coded signal transmission to the base station upon receiving a L1 acknowledgment corresponding to a previously transmitted coded signal;
- (d) cease coded signal transmission to the base station if no L1 acknowledgment corresponding to a transmitted coded signal has been received after a maximum number of repetitions; and
- (e) transmit message data to the base station after ceasing coded signal transmission if an L1 acknowledgement has been received by the mobile station.

88. The wireless mobile station of claim **87**, wherein:

in operation, the controller causes the mobile station to obtain synchronization data from the base station prior to transmitting the first coded signal.

89. The wireless mobile station of claim **88**, wherein:

in operation, the controller causes the mobile station to transmit the first coded signal at a timing based on the synchronization data.

90. The wireless mobile station of claim **87**, wherein said receiver comprises:

an analog-to-digital converter for converting the received message data from an antenna to a digital signal; and a component responsive to the digital signal from the analog-to-digital converter for detecting transmitted data.

91. The wireless mobile station of claim **87**, wherein said transmitter comprises a digital to analog converter responsive to digital signals from the formatter.

92. The wireless mobile station of claim **91**, wherein:

said mobile station further comprises: a modulator; and a variable gain device, coupled to the formatter, for adjusting levels of output from the formatter before application thereof to the modulator.

93. The wireless mobile station of claim **87**, wherein the controller causes the mobile station to further transmit additional coded signals to the base station, without any message data, at increasing separate and distinct power levels, each higher than a prior separate and distinct power level, until a maximum power level is reached.

94. The wireless mobile station of claim **87**, wherein the mobile station further performs functions to:

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transmit a collision detection signal to the base station after receipt of the L1 acknowledgement;

receive a base station collision detection signal from the base station, the base station collision detection signal corresponding to the transmitted collision detection signal;

transmit any of data and control information to the base station, after receipt of the base station collision detection signal; and

receive any of data and control information from the base station.

95. The wireless mobile station of claim **87**, wherein the mobile station further performs functions to:

transmit a collision detection signal to the base station following receipt of the L1 acknowledgement; and

cease signal transmission to the base station after a period of time if no base station collision detection signal corresponding to the transmitted collision detection signal has been received from the base station.

96. A wireless remote station, comprising:

a transmitter;

a receiver; and

a controller coupled to the receiver for responding to signals received via the receiver and coupled for controlling the transmitter, such that in operation the remote station performs the following steps:

transmit a plurality of coded signals at sequentially increasing separate and distinct power levels to the base station, each of the plurality of coded signals not including any message data;

receive an acknowledgement signal from the base station following transmission of one or more of the coded signals;

transmit a collision detection signal to the base station after receipt of the acknowledgement signal;

receive a base station collision detection signal from the base station, the base station collision detection signal corresponding to the transmitted collision detection signal;

transmit any of data and control information to the base station, after receipt of the base station collision detection signal; and

receive any of data and control information from the base station.

97. A wireless remote station, comprising:

a transmitter;

a receiver; and

a controller coupled to the receiver for responding to signals received via the receiver and coupled for controlling the transmitter, such that in operation the remote station performs the following steps:

transmitting a plurality of coded signals at sequentially increasing separate and distinct power levels to the base station, each of the plurality of coded signals not including any message data;

receiving an acknowledgement signal from the base station following transmission of one or more of the coded signals;

transmitting a collision detection signal to the base station following receipt of the acknowledgement signal; and

ceasing signal transmission to the base station after a period of time if no base station collision detection signal corresponding to the transmitted collision detection signal has been received from the base station.